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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,904	01/17/2002	Gregory Lavoie	40027.007	9123

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EXAMINER

BENSON, WALTER

ART UNIT PAPER NUMBER

2858

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,904

Applicant(s)

LAVOIE ET AL.

Examiner

Walter Benson

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment A, filed 9/18/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Amendment A, received on 9/18/03, has been entered into record. No claim amendments are currently presented.

2. Claims 1-28 are pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 3, 6, 11, 14, 15, 16, 19, 21, 22, 24, 25, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Clunn (US Patent No. 6,426,634 B1 and Clunn hereinafter).

5. As to claims 1 and 14, Clunn discloses a circuit breaker comprising:
trip circuitry (Fig. 1; col. 2, lines 52-67 and col. 3, lines 36-40);
a microprocessor (col. 3, lines 7-10);

a test signal generator incorporated in the circuit breaker for providing test signals to the trip circuitry under control of the microprocessor (col. 5, lines 15-29).

6. As to claim 24, Clunn discloses a system for testing a circuit breaker comprising:

first means for generating test signals, the first means being incorporated in the circuit breaker (col. 5, lines 15-20);

second means for testing trip circuitry of the circuit breakers with the test signals (col. 6, lines 16-22).

7. As to claims 2, 15, and 25, Clunn discloses a circuit breaker comprising:

where the test signal generator comprises either a current source, a voltage source or both for generating the test signals (col. 8, lines 30-37 and 43-49).

8. As to claims 3, 6, 16, and 26, Clunn discloses a circuit breaker further comprising:

a standard interface connected to the microprocessor for connecting to a corresponding standard interface on a general purpose computing device (col. 3, lines 46-48).

9. As to claims 11, 19, 21, and 22, Clunn discloses a circuit breaker further comprising:

at least one switch in a connection between the trip circuitry and the test signal generator, the switch being controlled by the microprocessor, the switch being open when the trip circuitry is not being tested so as to prevent erroneous test signals from causing a response by the trip circuitry (col. 2, lines 64-67 and col. 3, lines 1-2 and 36-40).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clunn in view of Whitney et al. (US Patent No. 6,628,498 B2 and Whitney hereinafter).

Although the apparatus and method disclosed by Clunn shows substantial features of the claimed invention (discussed above), it fails to disclose:

where the standard interface is a USB interface;

where the standard interface is an IEEE 1394 interface.

Nonetheless, these features are well known in the art and would have been an obvious modification of the apparatus and method disclosed by Clunn, as evidenced by Whitney.

In an analogous art, Whitney discloses a an electrical circuit protection device having:

where the standard interface is a USB interface (Fig. 11; col. 10, lines 45-47);

where the standard interface is an IEEE 1394 interface (Fig. 12; col. 10, lines 53-56).

Given the teaching of Whitney, a person having ordinary skill in the art at the time the invention was made would have readily recognized the desirability and advantages of modifying Clunn by employing the well known or conventional features of a network such as disclosed by Whitney for implementing a network of electric devices which are

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conventionally used separately, for managing and controlling these devices by standard interfaces.

12. Claims 7, 8, 9, 17, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clunn in view of Kochanski et al. (US Patent No. 6,653,562 B2 and Kochanski hereinafter).

Although the apparatus and method disclosed by Clunn shows substantial features of the claimed invention (discussed above), it fails to disclose:

a wireless interface connected to the microprocessor where wireless interface is a radio frequency transceiver or the wireless interface is an infra-red transceiver [claims 7,8,9,17,27].

Nonetheless, these features are well known in the art and would have been an obvious modification of the apparatus and method disclosed by Clunn, as evidenced by Kochanski.

In an analogous art, Kochanski discloses a portable electrical unit having:
a wireless interface connected to the microprocessor where wireless interface is a radio frequency transceiver or the wireless interface is an infra-red transceiver [claims 7,8,9,17,27] (col. 4, lines 34-51).

Given the teaching of Kochanski, a person having ordinary skill in the art at the time the invention was made would have readily recognized the desirability and advantages of modifying Clunn by employing the well known or conventional features of a network communications circuit such as disclosed by Kochanski for managing communications between the circuit breaker and wireless network, for managing and controlling these devices by standard interfaces.

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13. Claims 10, 18, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clunn in view of Dollar, II et al. (US Patent No. 6,545,479 B1 and Dollar, II hereinafter).

Although the apparatus and method disclosed by Clunn shows substantial features of the claimed invention (discussed above), it fails to disclose:

a network interface connected to the microprocessor for connecting said microprocessor to a data network [claims 10,18, 28].

Nonetheless, these features are well known in the art and would have been an obvious modification of the apparatus and method disclosed by Clunn, as evidenced by Dollar II.

In an analogous art, Dollar II discloses a portable circuit breaker tester having:

a network interface connected to the microprocessor for connecting said microprocessor to a data network [claims 10,18, 28] (Fig. 9; col. 4, lines 44-67).

Given the teaching of Dollar II, a person having ordinary skill in the art at the time the invention was made would have readily recognized the desirability and advantages of modifying Clunn by employing the well known or conventional features of a network such as disclosed by Dollar II for implementing a communications circuit between electric devices and circuit breaker, for managing and controlling these devices by bi-directional communications.

14. Claims 12, 13, 20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clunn in view of Stumme. (US Patent No. 5,272,438 and Stumme hereinafter).

Although the apparatus and method disclosed by Clunn shows substantial features of the claimed invention (discussed above), it fails to disclose:

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a receptacle forming a gap in a connection between the trip circuitry and the test signal generator and a key for insertion in the receptacle to bridge the gap allowing communication between the trip circuitry and the test signal generator [claims 12,20,23].
where the key is a rating plug [claim 13].

Nonetheless, these features are well known in the art and would have been an obvious modification of the apparatus and method disclosed by Clunn, as evidenced by Stumme.

In an analogous art, Stumme discloses a portable circuit breaker tester having:
a receptacle forming a gap in a connection between the trip circuitry and the test signal generator [col. 3, lines 4-12] and a key for insertion in the receptacle to bridge the gap allowing communication between the trip circuitry and the test signal generator [claims 12,20,23] (col. 3, lines 13-25) to test the rating of the circuit breaker.

where the key is a rating plug [claim 13] (col. 3, lines 3-4).

Given the teaching of Stumme, a person having ordinary skill in the art at the time the invention was made would have readily recognized the desirability and advantages of modifying Clunn by employing the well known or conventional features of removable rating plugs such as disclosed by Stumme for providing a reference for the frame rating of the circuit breaker for maximum continuous current and for the purposes discussed above.

15. Applicant's arguments with respect to claims 1-28 filed on 9/18/03 have been fully considered but are moot in view of the new ground(s) of rejection.

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16. In the remarks the applicant argued in substance that:

(1) Clunn (632) does not disclose the test signal generator incorporated into the circuit breaker.

(2) Clunn (632) and Fraisse fail to teach or suggest the test signal generator incorporated into the circuit breaker for providing test signals to trip circuitry in combination with a wireless interface.

17. Examiner respectfully traverses applicant's remarks:

As to point (1), see paragraphs above, Clunn (634) does disclose a test signal generator incorporated in the circuit breaker for providing test signals to the trip circuitry under control of the microprocessor (col. 5, lines 15-29).

As to point (2), see paragraphs above, Clunn (634) and Kochanski discloses a wireless interface connected to the microprocessor where wireless interface is a radio frequency transceiver or the wireless interface is an infra-red transceiver [claims 7,8,9,17,27] (col. 4, lines 34-51).

Prior Art Made of Record

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

A. Baldwin (US 2002/0181175) discloses a method and apparatus for providing a ground fault interrupter.

B. Adams et al. (US Patent No. 6,489,784 B2) discloses a method and apparatus for measuring at least one parameter of material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter Benson whose telephone number is (703) 306-4525. The examiner can normally be reached on Mon to Fri 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

Walter Benson *WB*
Patent Examiner

December 1, 2003


N. Le
Supervisory Patent Examiner
Technology Center 2800